

### **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1 - 24 (canceled)

Claim 25 (currently amended): A culture medium for culture of ES cells comprising LIF and PD098059, wherein said culture medium is free of ES cells ~~a first compound that activates gp130 and a second compound, which is different from the first compound and inhibits.~~

Claims 26-33 (canceled)

Claim 34 (currently amended): A method of deriving ES cells comprising: (i) isolating cells from an embryo or embryoid body; (ii) maintaining a culture of those isolated cells in the presence of: (a) LIF and (b) PD098059 ~~a first compound that activates gp130 and (b) a second compound, which is different from the first compound and inhibits MEK;~~ (iii) dissociating the cells obtained from (ii); and (iv) maintaining dissociated cells obtained from (iii) in culture in the presence of: (a) LIF and (b) PD098059 ~~a third compound that activates gp130 and (b) a fourth compound, which is different from the third compound and inhibits MEK.~~

Claim 35 (canceled)

Claim 36 (previously presented): The method of Claim 34 comprising developing an embryo in vivo, harvesting the embryo prior to pro-amniotic cavity formation and isolating cells therefrom.

Claim 37 (currently amended): A method of deriving ES cells comprising: (i) developing an embryo *in vitro*; (ii) isolating cells from the inner cell mass of the embryo; (iii) maintaining those isolated cells in the presence of PD098059 ~~a compound that inhibits MEK~~; (iv) dissociating the cells obtained in (iii); and (v) maintaining dissociated cells from (iv) ~~(iii)~~ in culture in the presence of PD098059 ~~a compound that inhibits MEK~~.

Claims 38 - 50 (canceled)